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ABSTRACT OF THE DISCLOSURE

The invention provides a joined body of a first member made of a metal and a second member made of a ceramic or a cermet. The joined body comprises a joining portion interposed between the first member and the second member for joining the first and second members. The joining portion comprises main phase contacting the first member and an intermediate ceramic. layer existing between the second member and the main phase and contacting the second member. The main phase is composed of a porous bone structure having open pores and is made of a sintered product of metal powder, and a ceramic phase impregnated into the open pores in the porous bone structure. The joined structure has resistance to fatigue and fracture, even when the structure is subjected to repeated thermal cycles between a high temperature, for example 1000°C or higher, and room temperature.